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\*\*\*\*\* Welcome to STN International \*\*\*\*\*

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	OCT 04	Precision of EMBASE searching enhanced with new chemical name field
NEWS	3	OCT 06	Increase your retrieval consistency with new formats or for Taiwanese application numbers in CA/CAPLUS.
NEWS	4	OCT 21	CA/CAPLUS kind code changes for Chinese patents increase consistency, save time
NEWS	5	OCT 22	New version of STN Viewer preserves custom highlighting of terms when patent documents are saved in .rtf format
NEWS	6	OCT 28	INPADOCDB/INPAFAMDB: Enhancements to the US national patent classification.
NEWS	7	NOV 03	New format for Korean patent application numbers in CA/CAPLUS increases consistency, saves time.
NEWS	8	NOV 04	Selected STN databases scheduled for removal on December 31, 2010
NEWS	9	NOV 18	PROUSDDR and SYNTHLINE Scheduled for Removal December 31, 2010 by Request of Prous Science
NEWS	10	NOV 22	Higher System Limits Increase the Power of STN Substance-Based Searching
NEWS	11	NOV 24	Search an additional 46,850 records with MEDLINE backfile extension to 1946
NEWS	12	DEC 14	New PNK Field Allows More Precise Crossover among STN Patent Databases
NEWS	13	DEC 18	ReaxysFile available on STN
NEWS	14	DEC 21	CAS Learning Solutions -- a new online training experience
NEWS	15	DEC 22	Value-Added Indexing Improves Access to World Traditional Medicine Patents in CAPLUS
NEWS	16	JAN 24	The new and enhanced DPCI file on STN has been released
NEWS	17	JAN 26	Improved Timeliness of CAS Indexing Adds Value to USPTAFULL and USPTA2 Chemistry Patents
NEWS	18	JAN 26	Updated MeSH vocabulary, new structured abstracts, and other enhancements improve searching in STN reload of MEDLINE
NEWS	19	JAN 28	CABA will be updated weekly
NEWS	20	FEB 23	PCTFULL file on STN completely reloaded
NEWS	21	FEB 23	STN AnaVist Test Projects Now Available for Qualified Customers
NEWS	22	FEB 25	LPCI will be replaced by LDPCI
NEWS	23	MAR 07	Pricing for SELECTing Patent, Application, and Priority Numbers in the USPAT and IFI Database Families is Now

Consistent with Similar Patent Databases on STN

NEWS EXPRESS 17 DECEMBER 2010 CURRENT WINDOWS VERSION IS V8.4.2 .1,  
AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2011.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 12:23:06 ON 29 MAR 2011

=> file registry

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.23

0.23

FILE 'REGISTRY' ENTERED AT 12:23:50 ON 29 MAR 2011

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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STRUCTURE FILE UPDATES: 28 MAR 2011 HIGHEST RN 1271522-06-5

DICTIONARY FILE UPDATES: 28 MAR 2011 HIGHEST RN 1271522-06-5

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<http://www.cas.org/legal/infopolicy.html>

TSCA INFORMATION NOW CURRENT THROUGH January 14, 2011.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> e dioctyltin oxide/cn

E1 1 DIOCTYLtin MERCAPTOPROPIONATE/CN

E2 1 DIOCTYLtin OXALATE/CN

```

E3      1 --> DIOCTYLtin OXIDE/CN
E4      1      DIOCTYLtin PERCHLORATE/CN
E5      1      DIOCTYLtin PHOSPHITE/CN
E6      1      DIOCTYLtin PHTHALATE/CN
E7      1      DIOCTYLtin S,O-3-MERCAPTOPROPIONATE/CN
E8      1      DIOCTYLtin S,O-MERCAPTOACETATE/CN
E9      1      DIOCTYLtin S,S'-BIS (ISOOCTYL MERCAPTOACETATE)/CN
E10     1      DIOCTYLtin S,S-BIS (THIOACETIC ACID OCTYL ESTER)/CN
E11     1      DIOCTYLtin STEARATE OLEATE/CN
E12     1      DIOCTYLtin SULFIDE/CN

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=> s e3

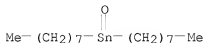
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L1      1 "DIOCTYLtin OXIDE"/CN
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=> d l1

```

L1  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2011 ACS on STN
RN  870-08-6  REGISTRY
ED  Entered STN:  16 Nov 1984
CN  Stannane, dioctyloxo-  (CA INDEX NAME)
    OTHER CA INDEX NAMES:
CN  Dioctyltin oxide (6CI)
CN  Tin, dioctyloxo- (7CI)
    OTHER NAMES:
CN  Di-n-octyltin oxide
CN  Dioctyloxostannane
CN  Irgastab T 161
CN  NSC 140743
CN  Stann OO
CN  U 800
CN  U 800 (heat stabilizer)
MF  C16 H34 O Sn
CI  COM
LC  STN Files:  ANABSTR, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS,
                CHEMINFORMRX, CHEMLIST, Gmelin*, IFICDB, IFIPAT, IFIUDb, PIRA,
                REAXYSFILE*, RTECS*, TOXCENTER, USPAT2, USPATFULL, USPATOLD
                (*File contains numerically searchable property data)
    Other Sources:  EINECS**, NDSL**, TSCA**
                (**Enter CHEMLIST File for up-to-date regulatory information)

```



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

```

444 REFERENCES IN FILE CA (1907 TO DATE)
32 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
444 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```

=> e didecyltin oxide/cn

```

E1      1      DIDECYLTIN DINITRATE/CN
E2      1      DIDECYLTIN MALEATE/CN

```

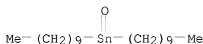
E3 1 --> DIDECYLTIN OXIDE/CN  
 E4 1 DIDECYLTOLYLAMINE/CN  
 E5 1 DIDEETHYLFLURAZEPAM/CN  
 E6 1 DIDEETHYLSIMAZINE/CN  
 E7 1 DIDEGLUCOPARILLIN/CN  
 E8 1 DIDEQUANYLDIHYDRO-N-METHYLSTREPTOMYCIN/CN  
 E9 1 DIDEQUANYLDIHYDROSTREPTOMYCIN/CN  
 E10 1 DIDEQUANYLSTREPTOMYCYLAMINE/CN  
 E11 1 DIDEHYDRO-A-MATRINIDINE/CN  
 E12 1 DIDEHYDRO-E-VINIFERIN/CN

=> s e3

L2 1 "DIDECYLTIN OXIDE"/CN

=> d l2

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2011 ACS on STN  
 RN 94678-16-7 REGISTRY  
 ED Entered STN: 09 Feb 1985  
 CN Stannane, didecyl-, 1-oxide (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Stannane, didecyloxo- (9CI)  
 CN Tin, didecyloxo- (7CI)  
 OTHER NAMES:  
 CN Didecyltin oxide  
 MF C20 H42 O Sn  
 LC STN Files: CA, CAPLUS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e nonyltin oxide/cn

E1 1 NONYLTHIOURONIUM CHLORIDE/CN  
 E2 1 NONYLTHIOURONIUM CHLORIDE/CN  
 E3 0 --> NONYL TIN OXIDE/CN  
 E4 1 NONYLTRICHLOROSILANE/CN  
 E5 1 NONYLTRIETHOXYSILANE/CN  
 E6 1 NONYLTRIETHYLAMMONIUM/CN  
 E7 1 NONYLTRIETHYLAMMONIUM BROMIDE/CN  
 E8 1 NONYLTRIETHYLAMMONIUM ION/CN  
 E9 1 NONYLTRIMETHYLAMMONIUM/CN  
 E10 1 NONYLTRIMETHYLAMMONIUM BROMIDE/CN  
 E11 1 NONYLTRIMETHYLAMMONIUM CHLORIDE/CN  
 E12 1 NONYLTRIMETHYLAMMONIUM HYDROGEN PHTHALATE/CN

=> e nonyl tin oxide/cn

E1 1 NONYL THIOGLYCOLATE/CN

```

E2      1      NONYL TIGLATE/CN
E3      0 --> NONYL TIN OXIDE/CN
E4      1      NONYL TITANATE (C9H19O)4TI/CN
E5      1      NONYL TITANATE(IV) ((C9H19O)2TIO)/CN
E6      1      NONYL TITANATE(IV) ((C9H19O)4TI)/CN
E7      1      NONYL TOLYL PHOSPHATE, (C9H19O) (C7H7O)2PO/CN
E8      1      NONYL TRIBROMOACETATE/CN
E9      1      NONYL TRICHLOROACETATE/CN
E10     1      NONYL TRICHLOROACRYLATE/CN
E11     1      NONYL TRIFLUOROACETATE/CN
E12     1      NONYL TRIMELLITATE/CN

```

=> file caplus, agricola

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	21.82	22.05

FILE 'CAPLUS' ENTERED AT 12:31:02 ON 29 MAR 2011  
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 COPYRIGHT (C) 2011 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'AGRICOLA' ENTERED AT 12:31:02 ON 29 MAR 2011

```

=> s transesterificaiton (P) esterification (P) (fat# or oil#)
L3      0      TRANSESTERIFICAITON (P) ESTERIFICATION (P) (FAT# OR OIL#)

```

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=> s biodiesel and (l1 or l2)
L4      1      BIODIESEL AND (L1 OR L2)

```

=> d l4 ibib abs

```

L4  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2005:612439  CAPLUS
DOCUMENT NUMBER: 143:117808
TITLE: Improved process for preparing fatty acid alkyl esters
        using as biodiesel
INVENTOR(S): Gupta, Ashok Kumar; Bhatnagar, Ajay Kumar; Kaul,
        Savita
PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India
SOURCE: PCT Int. Appl., 16 pp.
        CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

```

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005063954	A1	20050714	WO 2003-IN416	20031230
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,			

BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2552371	A1	20050714	CA 2003-2552371	20031230
AU 2003290414	A1	20050721	AU 2003-290414	20031230
AU 2003290414	B2	20101104		
EP 1711588	A1	20061018	EP 2003-782777	20031230
R: AT, DE, FR, GB, IT				
BR 2003018651	A	20061128	BR 2003-18651	20031230
CN 1894390	A	20070110	CN 2003-80111007	20031230
IN 2004DN00397	A	20060310	IN 2004-DN397	20040220
IN 239072	A1	20100312		
US 20070282118	A1	20071206	US 2007-585041	20070612
PRIORITY APPLN. INFO.:			WO 2003-IN416	W 20031230
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
AB Fatty acid alkyl esters suitable for use as biodiesel are produced by a single step esterification of free fatty acids and transesterification of triglycerides from vegetable oils or animal fats or combinations thereof with a lower alc. (e.g. methanol) in presence of alkyl tin oxide as catalyst. Thus, such an improved process comprises the steps of, a. reacting fatty acid glycerides with an alc. having 1-4 carbon atoms in the molar ratio of 3:1 to 30:1 of fatty acids and triglycerides resp., at a temperature ranging between 70-300°, pressure in the range of 1-30 bar, in presence of a organometallic catalytic compound of Tin with concentration of catalyst is in the range of 0.01 to 3 weight percent of the fatty acid glycerides; b. obtaining ester with glycerol; c. separating the glycerin from the fatty acid alkyl ester as immiscible phase by decantation; d. purifying the fatty acid alkyl esters by washing with water, and e. washed ester is treated with an basic adsorbent to obtain biodiesel.				
OS.CITING REF COUNT:	4	THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)		
REFERENCE COUNT:	7	THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

=&gt; d his

(FILE 'HOME' ENTERED AT 12:23:06 ON 29 MAR 2011)

FILE 'REGISTRY' ENTERED AT 12:23:50 ON 29 MAR 2011

L1 E DIOCTYL TIN OXIDE/CN  
1 S E3  
L2 E DIDECYLTIN OXIDE/CN  
1 S E3  
E NONYL TIN OXIDE/CN  
E NONYL TIN OXIDE/CN

FILE 'CAPLUS, AGRICOLA' ENTERED AT 12:31:02 ON 29 MAR 2011

L3 0 S TRANSESTERIFICATION (F) ESTERIFICATION (P) (FAT# OR OIL#)  
L4 1 S BIODIESEL AND (L1 OR L2)

=&gt; s simultaneous (L) (transesterification and esterification)

PROXIMITY OPERATION NOT ALLOWED

Certain operators may not be nested in combination with other operators. A nested operator is valid only when it occurs at the same level or above the operator outside the nested phrase as determined by

the following precedence list:

1. Numeric
2. (W), (NOTW), (A), (NOTA)
3. (S), (NOTS)
4. (P), (NOTP)
5. (L), (NOTL)
6. AND, NOT
7. OR

For example, '(MONOCLONAL(W)ANTIBOD?)(L)ANTIGEN?' is valid since (W) is above (L) on the precedence list. However, '((THIN(W)LAYER)(L)PHOSPHOLIPID#)(A)LACTONE#' is not valid since (L) is below (A) on the precedence list. The only exception is the 'OR' operator. This operator may be used in combination with any other operator. For example, '(ATOMIC OR NUCLEAR)(W)REACTOR' is valid.

=> s transesterification (L) esterification

L5 2413 TRANSESTERIFICATION (L) ESTERIFICATION

=> s l5 and (fat# or oil#) and (fatty (a) acid (a) alkyl (a) ester#)

L6 44 L5 AND (FAT# OR OIL#) AND (FATTY (A) ACID (A) ALKYL (A) ESTER#)

=> s l6 and (l1 or l2)

L7 1 L6 AND (L1 OR L2)

=> d l7 ibib abs

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:612439 CAPLUS

DOCUMENT NUMBER: 143:117808

TITLE: Improved process for preparing fatty acid alkyl esters using as biodiesel

INVENTOR(S): Gupta, Ashok Kumar; Bhatnagar, Ajay Kumar; Kaul, Savita

PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005063954	A1	20050714	WO 2003-IN416	20031230
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,			

	TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
CA 2552371	A1 20050714	CA 2003-2552371 20031230
AU 2003290414	A1 20050721	AU 2003-290414 20031230
AU 2003290414	B2 20101104	
EP 1711588	A1 20061018	EP 2003-782777 20031230
R: AT, DE, FR, GB, IT		
BR 2003018651	A 20061128	BR 2003-18651 20031230
CN 1894390	A 20070110	CN 2003-80111007 20031230
IN 2004DN00397	A 20060310	IN 2004-DN397 20040220
IN 239072	A1 20100312	
US 20070282118	A1 20071206	US 2007-585041 20070612
PRIORITY APPLN. INFO.:		WO 2003-IN416 W 20031230
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT		
AB Fatty acid alkyl esters suitable		
for use as biodiesel are produced by a single step esterification		
of free fatty acids and transesterification of triglycerides		
from vegetable oils or animal fats or combinations		
thereof with a lower alc. (e.g. methanol) in presence of alkyl tin oxide		
as catalyst. Thus, such an improved process comprises the steps of, a.		
reacting fatty acid glycerides with an alc. having 1-4 carbon atoms in the		
molar ratio of 3:1 to 30:1 of fatty acids and triglycerides resp., at a		
temperature ranging between 70-300°, pressure in the range of 1-30 bar,		
in presence of an organometallic catalytic compound of Tin with concentration of		
catalyst is in the range of 0.01 to 3 weight percent of the fatty acid		
glycerides; b. obtaining ester with glycerol; c. separating the glycerin from		
the fatty acid alkyl ester as		
immiscible phase by decantation; d. purifying the fatty		
acid alkyl esters by washing with water, and		
e. washed ester is treated with an basic adsorbent to obtain biodiesel.		
OS.CITING REF COUNT:	4	THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
		(4 CITINGS)
REFERENCE COUNT:	7	THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
		RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=&gt; d his

(FILE 'HOME' ENTERED AT 12:23:06 ON 29 MAR 2011)

FILE 'REGISTRY' ENTERED AT 12:23:50 ON 29 MAR 2011

	E DIOCTYL TIN OXIDE/CN
L1	1 S E3
	E DIDECYL TIN OXIDE/CN
L2	1 S E3
	E NONYL TIN OXIDE/CN
	E NONYL TIN OXIDE/CN

FILE 'CAPLUS, AGRICOLA' ENTERED AT 12:31:02 ON 29 MAR 2011

L3	0 S TRANSESTERIFICATION (P) ESTERIFICATION (P) (FAT# OR OIL#)
L4	1 S BIODIESEL AND (L1 OR L2)
L5	2413 S TRANSESTERIFICATION (L) ESTERIFICATION
L6	44 S L5 AND (FAT# OR OIL#) AND (FATTY (A) ACID (A) ALKYL (A) ESTE
L7	1 S L6 AND (L1 OR L2)

=&gt; s l6 and (alkyl (s) tin)

L8 2 L6 AND (ALKYL (S) TIN)



=&gt; d 18 1-2 ibib abs

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2011 ACS on STN  
 ACCESSION NUMBER: 2008:1431496 CAPLUS  
 DOCUMENT NUMBER: 150:7245  
 TITLE: Immobilized esterification catalysts for producing fatty acid alkyl esters  
 INVENTOR(S): Gao, Yong  
 PATENT ASSIGNEE(S): Southern Illinois University Carbondale, USA  
 SOURCE: U.S. Pat. Appl. Publ., 15pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080289248	A1	20081127	US 2007-752666	20070523
WO 2008070756	A2	20080612	WO 2007-US86573	20071206
WO 2008070756	A9	20080814		
WO 2008070756	A3	20081002		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
EP 2089347	A2	20090819	EP 2007-865264	20071206
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR				
US 20100130763	A1	20100527	US 2010-517315	20100126
PRIORITY APPLN. INFO.:				
			US 2006-868755P	P 20061206
			US 2007-752666	A 20070523
			WO 2007-US86573	W 20071206

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Provided herein are processes for the production of biodiesel. In particular, provided is an esterification process in which an alc. reacts with free fatty acids in a lipid material comprising free fatty acids and glycerides in the presence of an immobilized zirconium(IV) metal salt to form fatty acid alkyl esters.

Also provided is combination process in which an esterification reaction converts the free fatty acids in a lipid material to fatty acid alkyl esters and a transesterification reaction converts the glycerides in the material to fatty acid alkyl esters

.

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2011 ACS on STN  
 ACCESSION NUMBER: 2005:612439 CAPLUS

DOCUMENT NUMBER: 143:117808  
 TITLE: Improved process for preparing fatty acid alkyl esters using as biodiesel  
 INVENTOR(S): Gupta, Ashok Kumar; Bhatnagar, Ajay Kumar; Kaul, Savita  
 PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India  
 SOURCE: PCT Int. Appl., 16 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005063954	A1	20050714	WO 2003-IN416	20031230
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2552371	A1	20050714	CA 2003-2552371	20031230
AU 2003290414	A1	20050721	AU 2003-290414	20031230
AU 2003290414	B2	20101104		
EP 1711588	A1	20061018	EP 2003-782777	20031230
R: AT, DE, FR, GB, IT				
BR 2003018651	A	20061128	BR 2003-18651	20031230
CN 1894390	A	20070110	CN 2003-80111007	20031230
IN 2004DN00397	A	20060310	IN 2004-DN397	20040220
IN 239072	A1	20100312		
US 20070282118	A1	20071206	US 2007-585041	20070612
PRIORITY APPLN. INFO.:			WO 2003-IN416	W 20031230

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Fatty acid alkyl esters suitable for use as biodiesel are produced by a single step esterification of free fatty acids and transesterification of triglycerides from vegetable oils or animal fats or combinations thereof with a lower alc. (e.g. methanol) in presence of alkyl tin oxide as catalyst. Thus, such an improved process comprises the steps of, a. reacting fatty acid glycerides with an alc. having 1-4 carbon atoms in the molar ratio of 3:1 to 30:1 of fatty acids and triglycerides resp., at a temperature ranging between 70-300°, pressure in the range of 1-30 bar, in presence of a organometallic catalytic compound of Tin with concentration of catalyst is in the range of 0.01 to 3 weight percent of the fatty acid glycerides; b. obtaining ester with glycerol; c. separating the glycerin from the fatty acid alkyl ester as immiscible phase by decantation; d. purifying the fatty acid alkyl esters by washing with water, and e. washed ester is treated with an basic adsorbent to obtain biodiesel.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

Serial No.: 10/585041\_D

(4 CITINGS)  
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 12:23:06 ON 29 MAR 2011)

FILE 'REGISTRY' ENTERED AT 12:23:50 ON 29 MAR 2011

E DIOCTYL TIN OXIDE/CN

L1 1 S E3

E DIDECYL TIN OXIDE/CN

L2 1 S E3

E NONYL TIN OXIDE/CN

E NONYL TIN OXIDE/CN

FILE 'CAPLUS, AGRICOLA' ENTERED AT 12:31:02 ON 29 MAR 2011

L3 0 S TRANSESTERIFICATION (P) ESTERIFICATION (P) (FAT# OR OIL#)

L4 1 S BIODIESEL AND (L1 OR L2)

L5 2413 S TRANSESTERIFICATION (L) ESTERIFICATION

L6 44 S L5 AND (FAT# OR OIL#) AND (FATTY (A) ACID (A) ALKYL (A) ESTE

L7 1 S L6 AND (L1 OR L2)

L8 2 S L6 AND (ALKYL (S) TIN)

=> log off

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

STN INTERNATIONAL LOGOFF AT 12:38:49 ON 29 MAR 2011